

Amendments to the Specification:

Please replace the paragraph beginning on line 33 of page 3 with the following amended paragraph:

Two matrices are introduced: \mathbf{V} is the ~~eigenvalue~~ eigenvector matrix for $\mathbf{H}^H\mathbf{H}$ and $\mathbf{\Lambda}$ is the eigenvalue matrix for $\mathbf{H}^H\mathbf{H}$. Device 100 transmits the product $\mathbf{A}\mathbf{s}$, where the matrix \mathbf{A} is the spatial multiplexing transmit matrix, where $\mathbf{A} = \mathbf{V}\mathbf{D}$. The matrix $\mathbf{D} = \text{diag}(d_1, \dots, d_L)$ where $|d_p|^2$ is the transmit power in p^{th} mode, or in other words, the power of the p^{th} one of the L signals where $p = 1$ to L . Device 200 receives $\mathbf{H}\mathbf{A}\mathbf{s} + \mathbf{n}$, and after maximal ratio combining for each of the modes, device 200 computes $\mathbf{c} = \mathbf{A}^H\mathbf{H}^H\mathbf{H}\mathbf{A}\mathbf{s} + \mathbf{A}^H\mathbf{H}^H\mathbf{n} = \mathbf{D}^H\mathbf{D}\mathbf{\Lambda}\mathbf{s} + \mathbf{D}^H\mathbf{V}^H\mathbf{H}^H\mathbf{n}$.